American AUGUST · 1960 25 CENTS CENTS CENTS

VARIETIES

CULTURE

PACKING

MARKETING



Packaging Means Profit



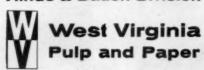
gets there in boxes of M/R Board

Buyers, packers and growers agree: Nothing else gets wet-cooled produce to market in fresher, better condition than boxes of M/R Board. These sturdy, lightweight shipping containers cushion rough handling, insulate more thoroughly, keep

fresh fruit and vegetables cooler longer.

They save money on storage, packing, handling and shipping. Get the facts about M/R Board boxes for shipping produce. See Hinde & Dauch—you stand to save important money.

Hinde & Dauch Division





FIELD PROVED, FEATURE PACKED... John BEAN POTATO HARVESTERS

John Bean Potato Harvesters are performance proven by years of field testing and development. Every year an increasing number of growers harvest with John Bean equipment because of the extra savings in time and labor, the cleaner, more profitable crops and the extra quality built into every harvester component.

CHOOSE THE MODEL AND ACCESSORIES BEST FOR YOUR SPECIFIC REQUIREMENTS

When you select a John Bean Harvester you can tailor the unit to your own particular field conditions and harvesting methods. To the basic machine, you may add the wheel and axle equipment, loading equipment, trash and vine attachments and other accessory items that best suit your specific needs.

John BEAN OFFERS EVERY FEATURE FOR DEPENDABILITY, LONG LIFE

VERSATILE POWER STEERING

Available for front and rear wheel steering. Decreases turning radius up to 50 per cent, provides better stability, guards against side slip on hills.

ADJUSTABLE SORTING TABLE

Wide rubber belt gently handles potatoes, automatically separates crop from trash and stones. Hydraulically controlled on Model 66, manual controls standard on Model 30, hydraulic controls optional.



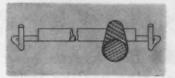
UP TO 10 BUSHELS PER MINUTE

with only a tractor driver and two men

CHAIN AND SPROCKET DRIVE

Positive operation under all conditions assured. Ruggedly built for long, dependable service. Equipped with slip clutch for added protection.

MOULDED RUBBER CHAIN LINKS



Provide positive, gentle handling of potatoes. Thick rubber covering is permanently bonded to metal links.



MODEL 30 Especially designed for medium acreage requirements, the Model 30 gives you every time and cost-saving advantage of mechanical harvesting.



MODEL 55 Power-take-off driven, designed for lighter digging conditions.

SEE YOUR JOHN BEAN DEALER - WRITE FOR FREE HARVESTER CATALOG



DIVISION OF

FOOD MACHINERY AND CHEMICAL CORPORATION



LANSING, MICHIGAN . ORLANDO, FLORIDA . SAN JOSE, CALIFORNIA



replenish copper-depleted soil



promotes healthy fruit and vegetable profits

The natural and economical way to promote fruit and vegetable profits is to give your crops the protection and nourishment of copper sulfate.

More than 70 years of dependable performance by Triangle Brand Copper Sulfate have eliminated the disease risks you take with fruit and vegetable profits. In spray and dust form, it controls the diseases which attack the foliage and fruit of citrus and nut trees, as well as blight and diseases in vegetable crops (leaf spot, anthracnose, etc.). It acts naturally to replace the copper in the soil.

Triangle Brand Copper Sulfate does other farm jobs, too. It controls farm pond scum and algae. On fence posts, it provides lasting protection against termites and rot.

Send for your free booklet, you'll find it rewarding.

Phelps Dodge

NEW YORK 22, NEW YORK



Reg. U.S. Pat. Off. Commercial Vegetable Grower Market Growers Journal

No. 8

AUGUST, 1960

Cover photograph by Gladys Diesing shows field of sweet corn.

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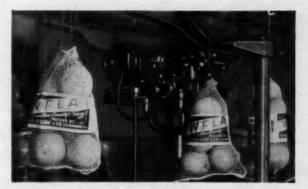
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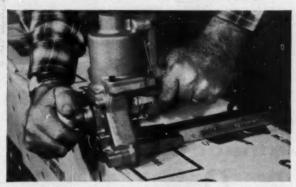
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BOSTITCH STREAMLINES FRUIT GROWER'S PACKING AND SHIPPING

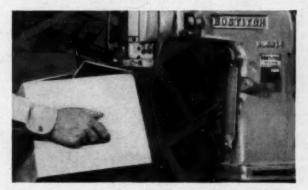
Faster packing, quicker shipping and lower shipping costs come with change to Bostitch stapling



Bagging Automation — Automatic Bostitch stapler closes drawstrings on bags of citrus ten times faster than hand tying. Handling labor was freed for other work.



A Bostitch Air-Driven Stupler seals cartons from the outside, protecting fruit from bruising. Lighter stapled cartons cut shipping costs, handle easier than wood baskets, get to destination faster.



Bostitch Economy Man recommended foot-operated Bostitch stapler to make up 4/5-bushel cartons. Bostitch machines demand minimum operator training and skill.



Bostitch Stapling Plier cuts closure time for small shipping bog to 15 seconds. Old method took 1 1/3 minutes. Plier also slashes prepackaging time for many fruits and vegetables.

CLEARWATER, FLA.—On-the-spot photos show the drastic improvements Bostitch stapling brought to David Bilgore & Co., Inc., citrus fruit packer and shipper.

If you need more speed in your shipping room and want to cut costs—call your Bostitch Economy Man. He can show you how Bostitch stapling can help. He's listed under "Bostitch" in your telephone book. Call him or mail the coupon at right for free data.

Fasten it better and faster with



*	With every Bostitch machine you get
*	
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	products will operate to your complete satisfaction.
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Protect
your
crops
from
insect
damage
and toxic
residues.
Use
Safe Dusts
made from
Dry
Pyrocide

You can have effective insecticide control... without running the risk of contaminating your crops... when you use dusts made with Dry Pyrocide. Dry Pyrocide gives immediate knockdown for almost all insects... yet it is so safe that dusts made from it are exempt from a tolerance under the Miller Amendment, even when used right up to market time!

FAST, SAFE, KILL

Dusts made from Dry Pyrocide paralyze insects almost immediately . . completely stops damage to your crops. Yet they are safe to apply, leave no toxic residues on your market crop. Ask your dealer about specific recommendations for economical dust made from Dry Pyrocide for your crop. Or, write to the address below for further information.



1715 S.E. Fifth Street . Minneapolis, Minnesota

MARKETS...

TRENDS AND FORECASTS

Special Report

AMERICAN VEGETABLE GROWER, AUGUST, 1960

LESS PRODUCTION OF RED-SKINNED POTATOES. Many producing areas are now planting fewer acres of red varieties and more russets. White varieties suitable for processing are also being favored by growers. This shift reflects the pressure of changing consumer demands. The shift may have been too rapid, since some markets report a short supply of reds this season.

FAIR PRICING OF CONTRACTED SWEET CORN. Mary-land Experiment Station has announced a method of pricing raw sweet corn so that the canner can offer a maximum price to growers for a given quality level, without risk of incurring any losses for himself. Plan involves correlating price with yield-quality changes for any stage of harvest.

MARKET ORDERS FOR VEGETABLE GROWERS? State and area marketing orders can effectively control quality of product marketed, limit quantity marketed, provide "check-off" funds for research and promotion, and build better consumer confidence in a producing area. But, market orders cannot maintain prices above competitive levels in the long run or prevent expansion of production. Also they often actually help competing areas by their quantity-control measures.

ONION OUTLOOK GOOD. Most spring and early summer areas are through. The late summer crop is reported fair with medium yields. Good movement of onions is expected at least through the summer.

SELLING DIRECT TO CHAINS. USDA predicts that direct purchases by chains from farmers, manufacturers, and assemblers will increase. Greater control over supply is the reason. Also a recent New York state study indicates that many produce buyers like to deal with local growers if they get regular delivery and if the produce is of good, uniform quality packaged the way the chain wants it.

MORE INTEREST IN PRODUCTION COST INFORMATION.

More cost of production studies on vegetable crops are being undertaken by ag colleges. Growers are recognizing that knowing the true production cost of individual crops is vital to success. This practice can lead to the production and marketing of the crops best suited to a given farm or region.

WINTER VEGETABLES FROM MEXICO. Latest figures from Foreign Agricultural Service show that in a two-week period in late February last year nearly 28 million pounds of winter vegetables from farms in western Mexico were shipped into the U.S. Main crops involved were sweet corn, cabbage, cucumbers, eggplant, onions, and peppers.

WHAT WILL BE THE ECONOMIC IMPACT OF RECENT WAGE DISPUTES ON AGRICULTURE? This depends. Uniform nationwide wage increases to farm workers would likely be reflected in higher prices to consumers. Gradual area-by-area increases will place severe economic pressure on affected growers, lead to faster development of mechanized work methods, and force a more rapid trend toward large-sized farms.

ANTHRACNOSE



BACTERIAL BLIGHT



They Cannot Survive Where KEYSTONE Bean Seed is Produced

Anthracnose and Bacterial Blight thrive and spread in moist areas with abundant rainfall. They can't survive in a dry climate.

Keystone bean seed is free from these diseases, because it is produced in Corneli's supervised growing fields in southern Idaho and other carefully selected arid regions of the western United States.

The Keystone production network of 12 major growing stations and 5 processing plants is your most complete and reliable source of quality vegetable seed.



CORNELI SEED COMPANY
BREEDERS AND GROWERS . ST. LOUIS 2, MO.





DITHANE M-22

Now, more than ever, DITHANE M-22 is your most effective protection against tomato diseases, and your greatest assurance of higher yields and bigger profits. This time-proved 80% maneb fungicide controls early and late blight, anthracnose, gray leaf spot and septoria leaf spot on tomatoes. It also improves the vigor and color of the plants . . . making bigger yields possible. To kill fruitworm, hornworm, pinworm and psyllid on tomatoes, use RHOTHANE insecticide . . . another field-proved product from your partner in crop protection. See your dealer now for dosage and timing information.

DITHANE and RHOTHANE are trademarks, Reg. U.S. Pat. Off. and in principal foreign countries.



Chemicals for Agriculture

ROHM & HAAS

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

LETTERS TO THE EDITOR

Pepper Promoter

Dear Editor:

I would like to make a suggestion. I believe the green pepper industry is missing the boat by not educating the housewife and packaging their product in a more attractive way. The edible portion of one medium orange contains approximately 50 mg. of ascorbic acid (vitamin C). One large green pepper contains approximately 120 mg. of vitamin C. More than twice as much!

Couldn't peppers be packed in plastic with a sign above the counter saying "Pick a pack of peppers for health" and the vitamin C information given below?

Bangor, Mich. Eileen Nutting

Seed Firming Wheel

Dear Editor:

I read the article by John Carew in your May issue with much interest and wish to make some comments.

wish to make some comments.

About 45 years ago I discovered that if I wanted an almost perfect stand of a crop I would come nearest to getting it if I ran a small furrow and sowed the seed in the bottom of it, then ran a heavy, narrow wheel down the row on top of the seed to pack the seed firmly in the ground. I then would pull loose dirt on top of the seed, leaving this loose ground a little higher than the general level of the soil (I used a wheelbarrow with a narrow wheel).

This method was too laborious for general practice (except in plant beds). I therefore decided that if the broad firming wheel were taken off the back of the seed drill and a narrow wheel placed just behind the furrower and run on top of the seed, firming it in the moist soil, then followed by the coverers, the idea would be as simple as the usual planting method, the ground would not bake on top of the seed after a rain, and the moisture would rise to the loose soil.

This idea corresponds to what John Carew mentions in his column, but it seems strange to me that it took 45 years for

someone else to discover it.

I am now 82 and I have over 2000 fruit trees and still plant vegetables. I was one of the charter subscribers to American Vegetable Grower and I find each issue more interesting and profitable.

Farmington, Mo. E. Longenecker

TOMATO YEARBOOK

JUST off the presses is the 1960 edition of American Tomato Yearbook. The yearbook gives a complete resume of the tomato industry with up-to-date charts and graphs; lists of recent references pertaining to tomato culture, diseases, pests, and their control; list of researchers and their current projects; and a three-page section on the Canadian tomato industry. Copies may be purchased for \$2 each from American Tomato Yearbook, P. O. Box 540, Westfield, N. J.

Vegetable Grower



supermarkets find the type of packaging job done may mean marketing success or fallure.

PACKAGING

Means PROFIT

An exclusive survey among top chains shows the need for more unit packaging of fresh vegetables

By ROBERT L. BULL University of Delaware, Newark

TODAY, in this era of self-service retailing, packaging has assumed the task of salesmanship. The role of packaging in the merchandising of fresh produce has grown to the point where the type of packaging job done can spell the difference between marketing success and failure.

Because of this, I am convinced that grower-shippers and packagers must find out what top management men in the retail field are planning for their produce operations. The future of packaging at all levels depends on the future direction of produce merchandising in the stores.

To help growers determine the future plans of retail distributors for their produce departments, the University of Delaware, in co-operation with Produce Packaging Association, recently conducted an exclusive survey among America's top chain executives.

Confidential reports on their present operations and on their predictions of things to come in the produce

industry were secured from top management men in such companies as Steinbergs, National Tea, Safeway, Dillon's, American Stores, Bonham's, Super Valu, Kroger, Colonial Stores, Throfare, Stop and Shop, Publix, etc.

These executives were asked if frozen and canned fruits and vegetables were still cutting into fresh produce volume. Two-thirds of the management men said "yes." In some instances, they felt the produce industry had not kept its products fully competitive in terms of consumer convenience and quality.

What were their recommendations for helping fresh produce compete more effectively for the consumer's dollar? More consumer-unit packaging; better point-of-sale identification of varieties and the best uses for each product; and partial preparation of more produce so that it can be featured in a ready-to-use form for so-called "convenience" shoppers.

Seven out of 10 chains reported selling more packaged produce in 1959 than in the previous year. No chain reported selling less in the packaged form. On the basis of total The name Robert L. Bull is not new to the pages of AMERICAN VEGETABLE GROWER. His excellent articles on roadside marketing have become an annual feature. As extension specialist in food distribution at University of Delaware and member of board of directors of Produce Packaging Association, Bull has had ample opportunity to observe produce operations of the major chain stores. In this synopsis of an address before New Jersey Cooperative Marketing Association, he reveals the thinking of top chain store executives on the future role of packaging in produce merchandising.—Ed.

volume by weight at retail level. 74% of the fresh fruits and vegetables are sold in packaged form. Every executive queried believed that the goal of retail produce operations should be 100% self-service, with all items which cannot be otherwise sold on a self-service basis packaged.

The retailers were asked to name the items they thought should be packaged and at what point packaging should be done.

The commodities named most often as the best ones for *shipping point* packaging were: Apples, carrots, onions, citrus, potatoes, radishes, cauliflower, tomatoes, grapes, Brussels

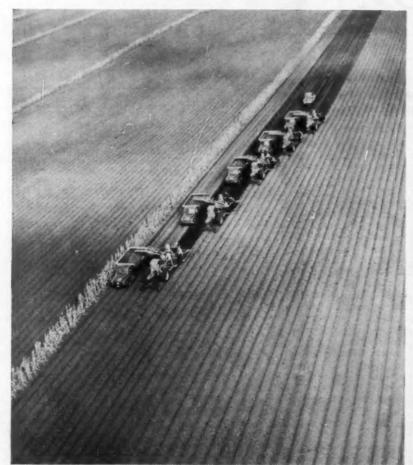
(Continued on page 16)



Some of the J. G. Hail and Sons potato harvesting equipment . .

1 Acre of Potatoes in 1928

In three decades the Hall family has pyramided its Champion brand potatoes into one of the largest growing and processing operations in the country



Double-row harvesters and trucks scoop up potatoes on 2000-acre Hall form. Champion Corp. manufactures the harvesters, eight of which are used during the 400,000-bushel harvest.

By ROBERT W. AMSTRUP

Walsh County Extension Agent, Park River N.D.

IN the Red River Valley of North Dakota, where the nation's No. 1 crop forms the major part of the income for the area, is located a highly mechanized and highly successful father-son potato growing and processing enterprise.

Here, at Edinburg, in Walsh County, five sons are following the good management practices established by their father, J. G. Hall, who has been in the potato business since the early 20's.

the early 20's.

In 1928 J. G.'s five sons—Bill, Barney, Ed, Joe, and Johnny—having come by their potato know-how naturally—started in the business with one acre of certified potatoes. Over 30 years later, in 1959, the family-operated enterprise of J. G. Hall and Sons was growing 2000 acres of commercial and certified potatoes which produced over 400,000 bushels.

The Halls do all of their planting and cultivating with four-row equipment. During harvesting, they use eight double-row potato harvesters, 24 trucks, plus elevators and conveyors. This equipment is manned by 62 workers.

The responsibilities of their expanded operation are divided between the five brothers.

Bill and Johnny are in charge of buying supplies and marketing, plus hiring and paying of labor. The family's Champion brand potatoes are



24 trucks and eight double-row harvesters as into action at harvesttime

TODAY...2000 ACRES!

packaged in two family-owned processing plants in Edinburg and Hoople, N. D., in 100-, 50-, 25-, 10-, and 5-pound bags. These are marketed through brokers and shipped via rail and truck. The majority of their potatoes are Red River Reds which are of high quality with good flavor for cooking and baking.

Joe and Barney plan the construction of the potato warehouses and other farm structures. Remodeling is done whenever needed, to keep pace with the latest in storage and processing.

Their largest potato storage bin holds 120,000 bushels. It is probably the largest individual bulk potato storage bin in the world. Their total potato storage capacity is about 500,000 bushels.

All of the storage warehouses are located near the washing or processing plant. This permits fluming of the potatoes by water direct to the washer.

Ed is in charge of the shop, a very important phase of the over-all operation, since it is so highly mechanized.

In the J. G. Hall and Sons enterprise, most of the land for potato production is rented at an average of \$15 per acre under renewable fiveyear contracts. Small grain, such as wheat and barley, is also grown as part of their operation.

Without a doubt, the Hall brothers are champions in the potato industry and their brand name Champion is very fitting.

THE END.



Family-award processing plant at Edinburg, N. D., where potatoes are graded, washed (sometimes waxed), and packaged. A newer plant similar to this is in operation at Hoopie, N. D.

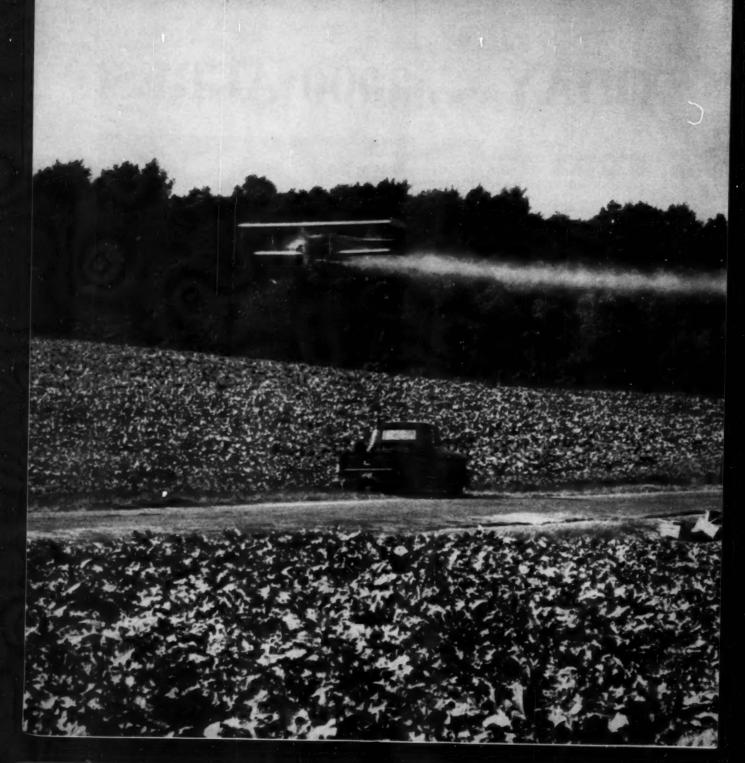


The three round-roofed buildings are the J. G. Hall and Sons' warehouses and processing plan in Edinburg, N. D. Storage capacity of potato warehouses is about 270,000 bushels.

AUGUST, 1960

NEW ORTHO® DIBROM® SOLVES INSECT CONTROL PROBLEM

Spectacular success of short-residual, fast-acting insecticide



PROBLEM: one of the largest vegetable-growing operations in the country needed effective, low-residual control of worms and aphids close to harvest time. Several other insecticides had proved unsatisfactory on broccoli, spinach and turnip greens, and time was short. **SOLUTION:** on the advice of the local ORTHO Fieldman, an initial shipment of 5 tons of ORTHO DIBROM 4 Dust was ordered. Results of the dusting were so outstanding that over 400,000 lbs. of remarkable new ORTHO DIBROM have been used, to date, by this one farm.

DIBROM effective in 15 minutes! Insects dropped from broccoli plants—dead just minutes after contact with dust.

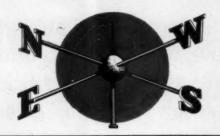


VEGETABLE GROWERS: here's how new ORTHO DIBROM helps you! Fast, effective kill of the most troublesome insect pests—mainly by contact action. Controls loopers and other caterpillars, leaf miners, aphids, leafhoppers. Effective on insects in all stages of growth, except eggs. Can be used within 4 days of harvesting. ORTHO DIBROM has a residual life of only a few days. Safe to use on cabbage, lettuce, beans, Brussels sprouts, cauliflower, many more. **Safer to handle**. Much less hazardous than most phosphate and certain chlorinated hydrocarbon insecticides. **Compatible** with most fungicides and insecticides, except highly alkaline materials. **Available in two forms**—ORTHO DIBROM 4 Dust or ORTHO DIBROM 8 Emulsive. See your local ORTHO Fieldman about this remarkable new ORTHO insecticide.



Helping the World Grow Better

STATE



NEWS

- Strike Costly to California Celery Grower
- Louisiana Pilot Plant to Process Sweets

18.5 Million Less

COLORADO—Lettuce from the state's 6000 acres is estimated at 90 million pounds this year, compared to 108.5 million pounds last year and the 10-year average of 55 million pounds, according to figures released by the Colorado Crop and Livestock Reporting Service

Labor Dispute Costly

CALIFORNIA — Latest victim in the campaign to organize agricultural labor in the Golden State is celery grower Lester Katsuda, Oxnard, Ventura County, who lost over \$30,000 when the United Packing House Workers of America struck his celery packing operation April 4.

Katsuda had employed a 27-man crew consisting of 14 Japanese Nationals, six Mexican Nationals, and seven local workers. They cut celery in the morning and packed in the afternoon at Katsuda's packing shed.

Operating in a familiar pattern, the union leaders apparently sponsored a plan to "load" Katsuda with their own representatives. In less than two weeks 29 men and 3 women were hired but they quit so quickly or were off work so much that efficiency in the packing house dropped from 320 crates per hour to 78. Quality of the pack was so low that Katsuda lost his best customer.

The strike started when two union-sponsored workers—both physically unable to do the work—were discharged.

On April 4, 11 men signed papers to strike, requesting 15 cents per hour more in the field, 25 cents per hour more in the packing shed, plus on-the-job training. Of those signing the papers, three had never been employed by or even seen Katsuda. One had worked only 45 minutes, another 134 hours.

The Mexican Nationals were withdrawn immediately. However, Japanese Nationals were retained pending investigation by Immigration and Naturalization Service to determine if strikers were legally justified in their demands. (No National may be employed if there is qualified local labor available.)

The pickets entered the fields and stood astride the celery rows, preventing the locals and Japanese from cutting. When the crew was moved to another field, the pickets moved in, kicked over packed crates, trampled and threw celery. Thirteen were arrested for destroying property and pickets were forbidden entrance to the fields. The packing shed was forced to close.

Katsuda then arranged to sell his crop to Oxnard Harvesting Company on a packout basis. But pickets intimidated their workers with threats of violence until they refused to harvest the crop.

With this delay, the celery bolted and some 30 acres were disked down at a loss of around \$1000 an acre.

Two grower associations in Ventura County then decided to take a stand. Some 25 growers with their regular employees crossed the picket lines to help Katsuda harvest the balance of his crop—about 30 acres. Inspired by the presence of the growers, some 35 local workers also crossed the picket lines to assist in the harvest. Packing was completed at a neighbor's plant.

Processing Plant for Instant Sweets

LOUISIANA—A pilot plant to process instant sweetpotatoes is under construction in New Orleans. USDA reports that the plant is scheduled for completion in time for the 1960 harvest. The department plans to produce enough sweetpotato flakes for consumer testing late this year.

Hybrid Onions Look Promising

NEW YORK—Premier and Empire—two new hard, high-yielding onion hybrids have been planted by growers in the Empire state, according to reports from Cornell University, Ithaca.

Premier—released jointly by Cornell and USDA—has excellent color at harvesttime. In tests conducted in New York, it outyielded Early Yellow by 10% and Brigham Yellow by 26%. After being in common storage until March, it had 40% more sound bulbs than Early Yellow and 8%



TOMATO HARVESTING—1960 STYLE Michigan State University's experimental tomato harvester (shown above) will be unveiled August 12 at Tomato Field Day on MSU's East Lonsing campus. Other topics on the agende are: Verietles adaptable to mechanical hervesting; test results on chemical weed control and plant spacing; methods of bulk handling tomatoes.

more than Brigham Yellow. It has performed well in northern areas.

Empire was released by Cornell, USDA, and Idaho Agricultural Experiment Station. Empire is pale at harvesttime but develops good color in curing. It has better storage quality than Premier. A hard onion, Empire is well adapted to northern growing areas.

Cornell specialists recommend growers plant both hybrids. Since Premier matures earlier than Empire, planting the two together extends the harvest season.

H. H. Richardson Dies

OHIO—H. H. Richardson, Cleveland, one of the founders and past president of Ohio Vegetable & Potato Growers Association, died at his home May 13. The Richardson family has been active in the vegetable industry in the Cleveland area for many years.

Red Springs Gets New Market

NORTH CAROLINA—Farmers Co-operative of Red Springs began operations in its new market in June. The new building was built through the combined efforts of Red Springs Merchants Association, who raised \$6000 for construction, and local growers, who contributed most of the labor.

First crop to be marketed from the new building was asparagus from the first commercial asparagus-growing operation in the Tar Heel state. Some 70 acres were harvested and growers predict an eventual asparagus crop of 500 to 1000 acres. The growers adopted the new crop when the Farmers Co-operative, seeking a new money crop, asked the state department of agriculture for assistance.

The co-op is now busy handling cucumbers. One hundred fifteen growers in the area are growing 240 acres under contract to Benjamin Lipitz Co., Philadelphia, Pa.

David S. Liles, manager of the new market, said the co-op will be packing about 2000 bushels of cucumbers per day. Tomatoes will also be marketed through the co-op this year.

YOU be the EXPERT!



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Answer on page 21

Answering Your OUESTIONS

Don't let your questions go unanswered. Whether large or small, send them with a four-cent stamp for early reply to Questions Editor, AMERICAN YEGETABLE GROWER, Willoughby, Ohio.

WHERE CAN I GET

Cuprinol weed preservative mentioned in your April issue for treating tomato stakes?—Indiana.

Darworth, Inc., Chemical Products Div., P.O. Box 308, Simsbury, Conn.

Guthion?—Minnesota.

Chemagro Corp., 437 Fifth Ave., New York 16, N.Y.

Metaldehyde?-Wisconsin.

California Spray-Chemical Corp., Richmond, Calif., Miller Products Co., 7737 N.E. Killingsworth, Portland 18, Ore.; and Andrew Wilson, Inc., Springfield, N.J.

THE DADDY OF THEM ALL

How big was the biggest watermelon?—Texas.

Back in 1935, O. D. Middlebrook of Hope, Ark., grew a watermelon that weighed 195 pounds.

Can you give me the names and addresses of some vegetable magazines published in England?
—California.

Some we receive regularly are: Grower and Prepacker, 49 Doughty St., London WC 1, England; Commercial Grower, 154 Fleet St., London EC 4, England; and Fruit, Flower, and Vegetable Trades Journal, 6/7 Gough Square, Fleet St., London EC 4, England.

CALENDAR OF COMING MEETINGS AND EXHIBITS

Aug. 2-3—Ohio Pesticide Institute, Ohio Agricultural Experiment Station, Wooster.

Aug. 7-19—American Institute of Cooperation summer conference, University of California, Berkeley.—AIC, 1616 H St., N. W., Washington, D.

D.C.

Aug. 12—Tomato Field Day, Horticulture
Farm, Michigan State University, East Lansing.
Aug. 14-18—South Carolina Farm and Home
Week, Clemson College, Clemson.—Thomas W.
Morgan, Chairman, Clemson College Extension
Service, Clemson.
Aug. 15-18—Farm and Home Week at Louisiana State University, Baton Rouge.
Aug. 25—Bean Field Day, George Schemm
Farm, Saginaw County, 1:30 p.m.—Michigan
State University Information Services, East
Lansing.

Aug. 25—Bean Field Day, George Schemm Farm, Saginaw County, 1:30 p.m.—Michigan State University Information Services, East Lansing.

Aug. 25—Vegetable Day, Washington State University Information Services, East Lansing.

Aug. 25—Vegetable Day, Washington State University Southwestern Washington Experiment Station, Vancouver.

Sept. 11-14—Produce Packaging Association annual convention and exposition, Americana Hotel, Miami Beach, Fla.—Robt. L. Carey, Exce. Sec'y, P.O. Box 29, Newark, Del.

Sept. 27-29—Florida Fruit & Vegetable Association annual convention, thotel Fontainebleau, Miami Beach.—J. Abney Cox, General Convention Chairman, Princeton.

Sept. 27-29—National Agricultural Chemicals Association annual meeting, Del Coronado Hotel, Coronado, Calif.—Denie Hayley, Director of Information, NACA, 1145 Nineteenth St., N.W., Washington 6, D.C.

Oct. 6-8—Pexas Citrus and Vegetable Growers and Shippers, Hilton Hotel, San Antonio.—Austin E. Anson, Exce. Vice-Pres., Gen. Mgr., TCVGS, 306 E. Jackson, Harlington.

Oct. 18-20—Western Growers Association annual meeting, Riviera Hotel, Las Vegas, Nev. Nev. 14-16—National Potato Council annual meeting, Washington, D.C.—A. E. Mercker, Exce. Dir., NPC, 542 Munsey Bildg., Washington, D.C.—Nev. 18-24—National Farm-City Week.—National Flarm-City Committee, Kiwanis International Bildg., 101 E. Erie St., Chicago II, III.

Nev. 28-Dec. 1—Vegetable Growers Association of America 52nd annual convention, Milwaukee Auditorium-Arena (Hotel Schroeder, headquar-ters), Milwaukee, Wis.—Robert M. Frederick, Exec.-Sey, 528 Mills Bildg., 17th & Pennsylvania Ave., N.W., Washington 6, D.C.

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AUGUST, 1960

As It Looks To Me

By JOHN CAREW

Michigan State University, East Lansing

THE patient was a healthy 220acre vegetable farm. Business was satisfactory. But the owner, let's call him Mr. X, wanted a thorough

checkup. To avoid the business ills that were plaguing his neighbors, he said.

First came an examination. Father and son raised tomatoes, peppers, cabbage, snap beans, cucumbers, muskmelons, sweet



corn, potatoes, and strawberries on excellent soil 30 miles from a city of 340,000. Sales were primarily through a commission house but also to several small chains.

The farm was laid literally on the table with an analysis of buying and selling methods, bookkeeping practices, labor management, and production techniques.

Then came the report:

Situation: Mr. X's son was remaining on the farm more out of a sense of loyalty to his father than a conviction that it was sound business

Remedy: Bring the son and his family into the business as a full-share partner with equal opportunities and rewards. Because he possesses a flair for selling, let him concentrate on the marketing end of the business.

S: Owner knew gross income for each crop but not net because he failed to keep cost-of-production records. Estimates indicated that snap beans and late potatoes were probably non-profit items.

R: Keep records of inputs (labor, equipment, and materials) for each field and crop—also costs of harvesting and marketing. Drop snap beans and late potatoes and increase high net income melons and tomatoes.

S: Farm operators were not familiar with many income tax deductions. For instance, at least half of the costs for the family cars could have been written off as business expenses. And the annual winter visit to Florida was, in part, a legitimate expense.

R: Consult a good farm income tax specialist; at least once, if not

annually.

S: Mr. X took pride in planting on a smooth seedbed. "A fine seedbed makes a fine farmer," he repeatedly told his help. As a result many fields were worked six to eight times before planting and that many times again before harvesting. The "pretty" farming packed his soil but not his wallet.

R: Reduce all tillage to a minimum. For sweet corn, plow and plant in a single operation followed

by 2,4-D sprays.

S: Harvesting and packing shed crews were not properly supervised. The son did his best but the father placed greater importance on a thorough job of cultivating.

R: Get off the tractor and stay off!

Labor management and just plain "thinking" are full-time jobs.

"thinking" are full-time jobs.

S: Mr. X and son were vaguely concerned about the future ability of their commission man to move produce. They weren't selling to bigger chains that increasingly dominated the local market. And they were impressed by the number of people who stopped at the farm for strawberries.

R: Invest time, money, and imagination to win chain store accounts; sell to growing—not dying—markets. Investigate pooling orders with neighboring growers of equal ability. Purchase the adjoining 40 acres with a knoll ideally suited for peaches. Plant peaches and semi-dwarf apples

that will build a strong pick-yourown business with strawberries.

S: Present sweet corn acreage will not warrant the purchase of a hydrocooler. But buyer resistance to noncooled produce is increasing.

R: Either increase sweet corn acreage or set up a custom cooling service. But buy a hydrocooler. Use

it to cool melons, too.

S: Majority of hourly workers are older people from local area; good replacements are scarce.

R: Accelerate mechanization. Begin the transition to bulk boxes and fork lifts. Buy conveyors for moving all materials, fertilizers as well as produce. Study work force reductions. Discard cold frames and build low labor requirement plastic greenhouses.

S: Yields of most crops are high but certain new practices and materials have never been tried. Present philosophy seems to be "Why sell

a winning horse?"

R: Winning horses have a way of growing old. Make trial planting of new varieties, especially hybrids. Increase spring applications of nitrogen on rye cover crops to 50 pounds. Trade in the old sprayer for an airblast type. Take advantage of the technically trained specialist already on the payroll—the county agricultural agent. Offer him land and assistance in conducting field experiments.

The End.

PACKAGING MEANS PROFIT

(Continued from page 9)

sprouts, root vegetables, and berries; for terminal warehouse packaging: tomatoes, citrus, spinach, potatoes, celery, lettuce, salads, and soft fruits; for in-store packaging: soft fruits, lettuce, celery, beans, and grapes.

The executives thought more packaging in consumer-units was needed for soft fruits, Northwest apples, grapes, cherries, sweetpotatoes, celery, bananas, corn, fruit combinations, lemons, asparagus, peppers, beans.

Nine out of 10 companies reported that the cost of consumer-unit packaging was paid entirely or largely through decreased spoilage, lower handling costs, and increased volume.

Yet, because present chain store accounting policies call for maintenance of certain gross profit margin standards at store level, many middle-management personnel responsible for sales and gross margins often cannot accept packaging without jeopardizing their records of performance, even when pre-store packaging makes more net profit for the overall company.

Only 15 of the companies surveyed had formed any policy on brand identification on produce not packaged by their own chain. National brand

identification was preferred by four of the 15, six preferred private chain brands, four had no preference, and one preferred no brand identification.

Only nine executives had any opinion on code dates for highly perishable packaged items, with five favor-

ing their use.

Every executive was asked to describe his most serious single problem in the sales management of the fresh produce division of his chain. In order of the number of mentions, these problems were:

• Stimulating store-level personnel to take a genuine interest in produce they handle and to accept new

packaging ideas.

• Learning to display produce for even greater selling effectiveness.

 Keeping the merchandise fresh through proper handling and rotation.
 Maintaining fairly uniform re-

 Maintaining fairly uniform retail prices to establish customer confidence.

 Helping suppliers of produce to understand and appreciate the retailers' problems and aid in their solution.

Probably the greatest of all talents in packaging for greater profit is the basic ability to think creatively. This cannot be over-emphasized. The End.

GREENHOUSE CROPS

Greenhouse Vegetable Day

A RECORD crowd heard the latest research findings at Greenhouse Vegetable Day held at Ohio Agricultural Experiment Station, Wooster.

Dr. F. S. Howlett summarized the results of last year's watering and temperature experiments. High, moderate, and low water treatments were used. The moderate water treatment of 2 inches per week gave the best combination of high quality and yield for both spring and fall crops. The lowest water treatment of 1/2 inch per week gave the smallest fruit in both spring and fall crops. Two inches of water per week for the fall crop gave poorest quality fruit while 1 inch gave best quality and yield. In the spring crop highest quality and yields were found with moderate watering of 2 inches per week or 24 inches per

Temperature experiments were conducted on tomato varieties Ohio



Growers saw tomatoes like these at Greenhouse Vegetable Day. Researchers are attempting to breed truits that ripen evenly and have good internal color as well as disease resistance.

W-R 7 and Ohio W-R 3. Ohio W-R 7 had less roughness than Ohio W-R 3 at any temperature. Best night temperature was 62° F. rather than 58° F., resulting in less roughness and highest quality for W-R 7. All factors pointed to variety W-R 7 as showing less cracking with fall water treatments and highest yield with less roughness than W-R 3 at either 58° F. or 62° F.

Dr. L. J. Alexander reported that Ohio W-R 7 has proven to be the best tomato variety that the greenhouse growers of this area have ever had. It is immune to Race 1 of the fusarium wilt organism, possesses very high resistance to blotchy ripening, is free of the fruit blemish pox, exhibits a high tolerance to excess manganese, and at the same time produces high yields of excellent quality fruit. However, even better varieties are being sought.—Fred K. Buscher, Cuyahoga County (Ohio) Agent.



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SWEET CORN

WILLIAM DONALD, JR., of Burlington, N. J., farms 140 acres of sweet corn and other vegetables and peaches. In addition to being an outstanding grower, he is

always ready to co-operate with the agricultural extension service on special projects.

This year Bill is participating in a special fertilization program for sweet corn that is being conducted by Dr. Roy Flannery and Prof. W. A. Mitcheltree, soil specialists with Rutgers University extension service.

Results of a complete soil test made on the Donald farm showed that about 124 pounds of phosphorus and potash would be sufficient. The pH-magnesium content was very satisfactory, no lime being needed. Recent research conducted by Dr. Flannery indicates that much time in fertilizing sweet corn could be saved by eliminating the side-dressings with complete fertilizer.

Based on the soil test, Prof. Mitcheltree developed a fertilization schedule. Briefly this is the program.

Five hundred pounds of 0-20-20 per acre were applied before plowing. This was disked in and plowed down

in March. The sweet corn was then planted with 300 pounds of 8-8-8 being applied in bands 2 inches on either side of the seed and 2 inches deeper than the seed.

When the corn was 6 inches high, the first side-dressing of 300 pounds of 8-8-8 was made. At the next cultivation, Donald side-dressed with 150 pounds of ammonium nitrate which is equivalent to 50 pounds of actual nitrogen. This was followed by another application of 175 pounds of ammonium nitrate at the time of last cultivation. A total of about 130 pounds of actual nitrogen per acre—the important element in growing sweet corn—was applied to the crop.

In addition to this new fertilization program, Donald also follows a modern insect control program. Bill follows the winter temperatures closely



William Donald side-dresses sweet corn with 300 pounds of 8-8-8 fertilizer at first cultivation.

and when the average temperatures for December, January, and February average out to more than 90° for the three months, he watches carefully for the first appearance of the flea beetle in the spring. Early susceptible varieties of sweet corn are sprayed with 1 pound of actual DDT per acre. The later varieties are not sprayed unless the beetles become populous enough to cause serious damage by their feeding.

A second application of DDT is made as soon as the beetles reappear in the fields. Usually two applications of DDT are sufficient for control.

Donald finds that the use of dinitro weed killer just as the corn is coming through the ground controls the early emerging beetles and thus results in the elimination of one DDT spray.

Borer is the next pest on the early varieties through the Carmelcross season. Two applications of DDT a week apart usually control this pest. First application is made when the tassels are appearing in the whorls; second application a week later.

It is important to remember that the wettable DDT powders are safest to use on sweet corn early in the season. Under certain conditions the emulsified DDT sprays can cause some damage to the corn if they are applied during wilt or borer seasons.

Donald finds that the earworm is

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the toughest corn pest to control. DDT and malathion are applied to the silks as soon as 25% of the ears are showing silk. In seasons of hot, dry weather when earthworm moths are abundant, he repeats these applications at three-day intervals. In August and September it is necessary to spray every two days.

Five nozzles per row are used in the earworm control program. One nozzle is placed directly above the corn with two drop nozzles on each side of the row. The nozzles are arranged so that the lower drop nozzle points upward at about a 45°



FATHER OF HYBRID SWEET CORN

Donald F. Jones, developer of first hybrid sweet corn, Redgreen, in 1924, has refired as head of department of genetics at Connecticut Agricul-tural Experiment Station, New Haven. He was a member of the station staff for 45 years.

angle. The upper nozzle, which is placed slightly above the silk of the corn, directs the spray in and down at a 45° angle.

To complete the program of high quality sweet corn production, Donald has a hydrocooler on the farm. As soon as the corn is pulled it is packed and put through the hydrocooler. It is then packed in refrigerated trucks and put to various markets throughout the eastern United States. This high quality, carefully graded and handled sweet corn usually brings a premium on the market. -D. L. Kensler, Burlington County (N. J.) Agricultural Agent, Mount Holly.

Answer to YOU be the EXPERT

See Page 14

Bacterial wilt, also known as Stewart's disease. The bacteria live through the winter inside corn flea beetles which feed on young plants early in the spring. Mild winters favor overwintering beetle populations and are commonly followed by years of heavy infection. Control is through early spraying with dieldrin or DDT wilt resistant varieties or later planting.

AUGUST, 1960

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Vegetable Grower

Speak Up, Mr. Mitchell!

"CELERY Grower Loses \$30,000 as Workers Strike"..."Workers Picket Cherry Orchard, \$200,000 Lost." These are just a sample of the headlines spilling out of California, producer of \$3 billion worth of food and fiber annually, as AFL-CIO Agricultural Workers Organizing Committee began their bitter battle to organize farm workers.

Chief crux of the union's efforts is to rid California's farm labor forces of some 100,000 Mexican Nationals employed yearly. Under federal regulations governing operation of the bracero program, no Mexican National may be used to fill any job which the Secretary of Labor finds is vacant because the occupant is out on strike or locked out in the course of a labor dispute.

This regulation, coupled with a decision by California Supreme Court that unions can picket an employer regardless of whether an employee-employer relationship exists, has already brought ruin and losses of highly perishable crops and one shudders to think of the total financial loss if state and federal officials continue to ignore growers' pleas.

What is a labor dispute? As interpreted by Irving L. Perluss, director of state department of employment, a single man picketing can constitute a labor dispute. These so-called labor disputes of one or two men picketing a grower who may never have even seen them before have effectively cut the channels through which California growers could seek help. No Mexican Nationals may be hired and California Placement Bureau refuses to refer local workers to growers entangled in a "labor dispute."

The man holding the key to unlock this tie-up of labor forces is Secretary of Labor James Mitchell. He is the one who under the federal regulation cited previously determines whether Mexican Nationals may be

employed by growers.

To date, Mr. Mitchell has been playing deaf to pleas of growers to give a reasonable definition of a labor dispute so that a picket line representing only a fraction of workers cannot block Mexican crews from harvest work.

In desperation before the unfriendliness of state officials, 14 agricultural groups have formed the California Food Emergency Committee to recruit pools of non-labor workers to aid strikebound growers. A delegation headed by committee chairman John Zuckerman, Stockton, placed the growers' case squarely before the silent Mr. Mitchell.

The growers' plight cannot be ignored. The rules of bargaining which govern other industries must not be applied to agriculture. A two-week delay in the production of, for example, refrigerators, may mean a slight decrease in the manufacturer's profits for that year. A two-week delay at harvesttime of a perishable crop may mean the loss of the entire crop . . . the loss of a grower's entire income for one year . . . the loss of vitally needed foodstuffs!

California is fast approaching the peak harvest season. The tomato crop alone is estimated at 3 million tons. In past seasons labor has been in short supply during peak months. The big question is if labor disputes bar Mexican workers from harvest crews, will growers be able to find enough local workers who will refuse to be intimidated by the labor union's strong arm tactics and will help in the harvest?

Even if growers should accept union demands, there is no guarantee that AWOC will be able to supply workers to complete the harvest. "We are not promising the grower a damn thing," is AWOC's state director Norman Smith's challenge to growers. To date, the union has yet to submit one formal contract to growers.

The union is demanding pay hikes as high as 25% above the present

average hourly wage rate of \$1 for farm labor in the Golden state. Fringe benefit demands include one-half portal to portal pay and free transportation to and from the job.

QUOTE-OF-THE-MONTH

"The agricultural population produces the bravest men, the most valiant solders, and a class of citizens the least given of all to evil designs."

—Cato

Why the sudden interest of labor in organizing farm workers? Robert M. Frederick, executive secretary of Vegetable Growers Association of America, raised an interesting point in VGAA's monthly newsletter, "View from the Hill." If the union succeeds in organizing farm workers and in forcing the grower to pay unreasonably high wages, the consumer will be the one who pays the difference in production costs. The cost of foodstuffs and other products are reflected in the monthly cost of living index. Many unions have negotiated contracts with employers which include an automatic raise in pay if the cost of living index increases.

Perhaps, Frederick suggests, the unions have found a way to increase wages without costly industry-wide strikes which have become unpopular with their own members as well as the nation as a whole. Since the first of these clauses was inserted in contracts, the cost of living index has held steady. But with the labor difficulties in California, experts are predicting that the base pricing level of food will increase 20 to 30% in the next two years. The effect of such an increase is obvious.

The pattern is being set in California. The Union's avowed ambition is to unionize all agricultural workers in all states. Smith has said if he can organize California he can organize any state. It is important now—at this point—at the beginning of the campaign to organize farm workers—that the rules and regulations under which the battle will be fought be made firm and equitable. Under present interpretations of the law, growers have two strikes against them before stepping to the plate.

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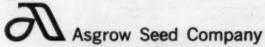
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